

AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Presented) A light source apparatus for an endoscope, comprising:

a main light source;

a light guide member whose incident end face is opposed to the main light source to guide light incident thereon to an emission end face thereof;

an auxiliary light source that is activated to emit light when no light is emitted from the main light source, and that is supported to move between a stand-by position in which the auxiliary light source is located out of a main light path between the main light source and an incident end face of the light guide member and an operative position in which the auxiliary light source is located in the main light path and is opposed to the incident end face of the light guide member when the main light source is inoperative; and

an auxiliary light source emission controller that drives the auxiliary light source at one of a continuous emission mode to emit light of a predetermined intensity and an intermittent emission mode to emit light of an intensity higher than the predetermined intensity,

wherein the auxiliary light source comprises a light emitting diode (LED), and said auxiliary light source emission controller drives the light emitting diode at a constant current smaller than an absolute maximum rated value of a forward

current of the light emitting diode when the continuous emission is performed, and drives the light emitting diode at a pulse current of which a crest value is higher than the absolute maximum rated value of the forward current when the intermittent emission is performed.

2. (Previously Presented) The light source apparatus of claim 1, wherein the light source apparatus is used with an endoscope processor to which one of an electronic endoscope and a fiber scope can be mounted, and wherein said auxiliary light source emission controller drives the auxiliary light source to emit light intermittently in synchronization with an image pickup operation of an image pickup device of the electronic endoscope when the electronic endoscope is connected to the endoscope processor and drives the auxiliary light source to emit light continuously when the fiber scope is connected to the endoscope processor.

3. (Previously Presented) The light source apparatus of claim 2, wherein said auxiliary light source emission controller drives the auxiliary light source to emit light intermittently in synchronization with a vertical synchronizing signal to drive the image pickup device.

4. (Cancelled)

5. (Previously Presented) The light source apparatus of claim 1, further comprising a selection switch that selects one of the intermittent emission of the auxiliary light source, at a pulse current, and the continuous emission of the auxiliary light source, through the auxiliary light source emission controller.

6. (Currently Amended) The light source apparatus of claim 1, further comprising a sensor that detects whether an electronic endoscope having the light guide member is mounted to an endoscope processor, wherein said auxiliary light source emission controller drives the auxiliary light source at a pulse current when the sensor detects that ~~an~~ the electronic endoscope having the light guide member is mounted.

7. (Previously Presented) A light source apparatus for an endoscope, comprising:

a main light source;

a light guide member whose incident end face is opposed to the main light source to guide light incident thereon to an emission end face thereof;

an auxiliary light source that is activated to emit light when no light is emitted from the main light source, and that is supported to move between a stand-by position in which the auxiliary light source is located out of a main light path between the main light source and an incident end face of the light guide member and an operative position in which the auxiliary light source is located in the main light path and is opposed to the incident end face of the light guide member when the main light source is inoperative; and

an auxiliary light source emission controller that drives the auxiliary light source at one of a continuous emission mode to emit light of a predetermined intensity and an intermittent emission mode to emit light of an intensity higher than the predetermined intensity,

wherein said auxiliary light source emission controller drives the auxiliary light source at a constant current smaller than an absolute maximum rated value of a forward current of the auxiliary light source when the continuous emission is performed, and drives the auxiliary light source at a pulse current of which a crest value is higher than the absolute maximum rated value of the forward current when the intermittent emission is performed.

8. (Previously Presented) The light source apparatus of claim 7, wherein the light source apparatus is used with an endoscope processor to which one of an electronic endoscope and a fiber scope can be mounted, and wherein said auxiliary light source emission controller drives the auxiliary light source to emit light intermittently in synchronization with an image pickup operation of an image pickup device of the electronic endoscope when the electronic endoscope is connected to the endoscope processor and drives the auxiliary light source to emit light continuously when the fiber scope is connected to the endoscope processor.

9. (Previously Presented) The light source apparatus of claim 8, wherein said auxiliary light source emission controller drives the auxiliary light source to emit light intermittently in synchronization with a vertical synchronizing signal to drive the image pickup device.

10. (Previously Presented) The light source apparatus of claim 7, further comprising a selection switch that selects one of the intermittent emission of the auxiliary light source, at a pulse current, and the continuous emission of the auxiliary light source, through the auxiliary light source emission controller.

11. (Currently Amended) The light source apparatus of claim 7, further comprising a sensor that detects whether an electronic endoscope having the light guide member is mounted to an endoscope processor, wherein said auxiliary light source emission controller drives the auxiliary light source at a pulse current when the sensor detects that ~~an~~ the electronic endoscope having the light guide member is mounted.